CLAIMS LISTING:

1. – 35. (Cancelled)

36. (Currently Amended) A method of reducing an amount of ~~a gas component~~ oxide of nitrogen (NO_x compound) in an exhaust gas flow of a combustion engine which is adapted for operation by a lean air/fuel mixture, said method comprising steps of:

feeding the exhaust gas flow from the engine to a separation unit;

separating in the separation unit ~~the~~ a gas component from the exhaust gas flow, said gas component being constituted by an oxide of nitrogen (NO_x compound) or water present in the exhaust gas flow, in a wall structure comprising a porous material which provides a selective passage of the gas component through the wall structure before other gas components in the exhaust gas flow based on molecular size and molecular form;

returning the separated gas component to an inlet of the engine via a conduit, said gas component including fresh air as a carrier gas for the gas component; and

detecting an amount of the oxide of nitrogen (NO_x compound) in the exhaust gas flow for controlling the amount of the ~~gas component~~ oxide of nitrogen (NO_x compound) present in the exhaust gas flow.

37. (Previously Presented) A method as claimed in claim 36, wherein the method further comprises the steps of:

feeding the exhaust gas flow from the engine into an exhaust gas operated turbine of a turbo-aggregate; and

the step of returning the separated gas component to the inlet of the engine further comprises compressing the separated gas component from the conduit in a compressor of the turbo-aggregate.

38. (Previously Presented) A method as claimed in claim 36, wherein the method further includes an additional step of supplying a reducing agent depending on the detected amount of the oxide of nitrogen.

39. (Previously Presented) A method as claimed in claim 38, wherein the method further comprises a step of diagnosing a function regarding reduction of the oxide of nitrogen.

40. (Previously Presented) A method as claimed in claim 37, wherein the method includes an additional step of supplying a reducing agent to an inlet of the separation unit for a catalytic reduction of the gas component in the wall structure by the reducing agent.

41. (Previously Presented) A method as claimed in claim 40, further comprising supplying the reducing agent from a tank forming a part of the engine and being intended for a regular fuel of the engine, and wherein the reducing agent is taken from the fuel.

42. (Previously Presented) A method as claimed in claim 41, including a step of feeding the reducing agent through the separation unit in essentially a counter-current flow in relation the exhaust gas flow.

43. (Previously Presented) A method as claimed in claim 42, including steps of:

feeding back a portion of the reducing agent which has not reacted with the gas component from the separation unit; and

returning the portion of the reducing agent to the inlet of the engine.

44. (Previously Presented) A method as claimed in claim 43, wherein the step of feeding back a portion of the reducing agent which has not reacted with the gas component from the separation unit includes feeding in fresh air as a carrier gas for the reducing agent.

45. (Previously Presented) A method as claimed in claim 44, including a step of supplying the reducing gas to the separation unit essentially continuously during lean operation of the engine.

46. (Currently Amended) A device for reducing an amount of ~~a gas component~~ oxide of nitrogen (NO_x compound)in an exhaust gas flow of a combustion engine which is adapted for operation by a lean air/fuel mixture, said device including:

a separation unit operable to be fed ~~the~~ an exhaust gas flow from the engine, said separation unit comprising a wall structure for separating the gas component from the exhaust gas flow, said gas component being constituted by an oxide of nitrogen (NO_x compound) or water present in the exhaust gas flow, said wall structure comprising a porous material which provides a selective passage of the gas component through the wall structure before other gas components in the exhaust gas flow based on molecular size and molecular form;

a conduit for returning the separated gas component to an inlet of the engine, said gas component including fresh air as a carrier gas for the gas component; and

a detector for detecting an amount of the oxide of nitrogen (NO_x compound) in the exhaust gas flow for controlling the amount of the ~~gas component~~ oxide of nitrogen (NO_x compound) present in the exhaust gas flow.

47. (Previously Presented) A device as claimed in claim 46, wherein the engine is provided with a turbo-aggregate with an exhaust gas operated turbine and a compressor for compressing air to be fed into the engine, characterized in that the conduit is connected upstream of the compressor.

48. (Previously Presented) A device as claimed in claim 46, said device being operable to supply a reducing agent depending on the detected amount of oxide of nitrogen.

49. (Previously Presented) A device as claimed in claim 48, said device being operable to diagnose a function regarding reduction of the oxide of nitrogen.

50. (Previously Presented) A device as claimed in claim 46, wherein the combustion engine includes a turbo-aggregate comprising an exhaust gas operated turbine and a compressor for compressing air for feeding into the engine, characterized in that the conduit is connected upstream of the compressor, said device being operable to supply a reducing agent to an inlet of the separation unit for resulting in a catalytic reduction of the gas component in the wall structure by using the reducing agent.

51. (Previously Presented) A device as claimed in claim 50, wherein the reducing agent is supplied from a tank forming a part of the engine and being intended for a regular fuel of the engine, and wherein the reducing agent is taken from the fuel.

52. (Previously Presented) A device as claimed in claim 51, said device being operable to feed the reducing agent through the separation unit in an essentially counter-current flow in relation the exhaust gas flow.

53. (Previously Presented) A device as claimed in claim 52, wherein the conduit is configured to feed back a portion of the reducing agent which has not reacted with the gas component from the separation unit and return the portion of the reducing agent to the inlet of the engine.

54. (Previously Presented) A device as claimed in claim 53, having an inlet configured to supply fresh air as a carrier gas for the reducing agent.

55. (Previously Presented) A device as claimed in claim 54, said device being operable to supply the reducing gas to the separation unit essentially continuously during lean operation of the engine.

56. (New) A device as in claim 36, wherein the gas component is water.

57. (New) A device as in claim 46, wherein the gas component is water.

58. (New) A device as in claim 36, wherein the gas component is oxide of nitrogen (NO_x compound).

59. (New) A device as in claim 46, wherein the gas component is oxide of nitrogen (NO_x compound).